## ON THE NAMES OF SOME SPECIES OF VIBURNUM.

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For many years a small Viburnum of the V. dentatum group, strongly marked among our New England species by its very short-petioled leaves and prominent stipules, has been known by the name Viburnum pubescens Pursh, based on V. dentatum  $\beta$ . pubescens Aiton. While working at the British Museum in 1915, I had an opportunity to examine not only the type of Aiton, on which the specific name must rest, but also the Solander manuscript of the Hortus Kewensis; and the study of this material shows that the name V. pubescens can by no means be used for the plant which has borne it so long, but must be applied to the species which was described by Britton in 1901 as Viburnum venosum.

In the Solander MSS. Viburnum dentatum and its varieties are twice dealt with, once on pages 761–763 of volume seven, and again on pages 765–767 of the same volume. The second of these treatments, which is the important one for the determination of the application of the name V. dentatum var. pubescens, runs as follows:

"dentatum. † Viburnum foliis ovatis subcordatis serrato-dentatis plicatis.

"lucidum. a. foliis utrinque glabris, petiolis elongatis. Viburnum dentatum. Linn. Spec. pl. 384. 4.

"pubescens.  $\beta$ . foliis ovato-oblongis acuminatis subtus villosis, petiolis elongatis.

<sup>1</sup> Pursh. Fl. Am. Sept. i. 202 (1814).

<sup>&</sup>quot;V. pubescens; foliis ovalibus acuminatis dentato-serratis plicato-sulcatis subtus villoso-tomentosis, cymis pedunculatis, fructibus oblongis.

<sup>&</sup>quot;V. dentatum pubescens. Ait. kew. l. p. 168.

<sup>&</sup>quot;V. dentatum tomentosum. Mich. fl. amer. l. p. 179.

<sup>&</sup>quot;In the lower parts of Virginia and Carolina. h. June. v. v. The whole of the shrub smaller than the preceding one."

<sup>&</sup>lt;sup>2</sup> Ait. Hort. Kew. ed. 1. i. 372 (1789); ed. 2. ii. 168 (1811).

<sup>&</sup>quot;dentatum. 8. V. foliis ovatis dentato-serratis plicatis. Sp. pl. 384. Jacqu. hort. 1. p. 13.

<sup>&</sup>quot;lucidum. a foliis utrinque glabris.

<sup>&</sup>quot;Shining tooth'd leav'd Viburnum.

<sup>&</sup>quot;pubescens. \$ foliis acuminatis subtus villosis.

<sup>&</sup>quot;Downy tooth'd-leav'd Viburnum.

<sup>&</sup>quot;Nat. of North America.

<sup>&</sup>quot;Introd. 1736, by Peter Collinson, Esq. Coll. mss.

<sup>&</sup>quot;Fl. June and July.

н. h."

<sup>&</sup>lt;sup>3</sup> Britton, Man. ed. 1. 871 (1901).

"sessile. γ. foliis ovatis acutis subtus villosis, petiolis brevissimis hirtis.

"Habitat in America septentrionali prope Montes Kattskill.

J. Bartram. Frutex vix tripedalis. J. Bartram. Obs. Hoc...

[illegible] — distincta species?"

The type of a. lucidum, from "America sept. J. Bartram 1764 [after which 77 has been written in pencil]" is good V. dentatum L. as now taken by all authors. The type of  $\beta$ . pubescens, marked "Hort. Dr. Lee," and labeled in Solander's own hand, is a characteristic specimen of the plant now passing as V. venosum Britton. A tracing of this specimen is now in the Gray Herbarium. The type of  $\gamma$ . sessile, a flowering scrap with a detached leaf and portion of cyme, labeled "America sept. Katskill mountains J. Bartram 1764 [after which 74 is added in pencil] 3 pedalis," is the species now passing as V. pubescens (Ait.) Pursh and so designated, for instance, in the last edition of Gray's Manual.

By reference to the treatment in Aiton's Hortus Kewensis as issued, given in a previous footnote, it will be seen that Solander's  $\gamma$ . sessile was dropped entirely, and that there is consequently no reference in that work to the plant now called V. pubescens. Pursh's name V. pubescens, being based directly on the  $\beta$ . pubescens of Aiton, must therefore be transferred to the species now called V. venosum Britton. It is probable, furthermore, that the plant which Pursh really had in mind as V. pubescens was V. venosum, for the only specimens of the V. dentatum group collected by Pursh which I was able to find at the Kew Herbarium consisted of a branch of V. venosum on a sheet with two scraps of the somewhat pubescent form of V. dentaium, the whole labeled Viburnum dentatum in an old hand which V. Skan, the librarian at Kew, was not able to identify.

The oldest name which has been considered to refer to the short-petioled plant, the *V. pubescens* of authors but not of Pursh, is *Viburnum villosum* Raf. Med. Rep. N. Y. hex. II. v. 361 (1808). Rafinesque's name being debarred from use in any case, because of an earlier and valid *V. villosum* of Swartz (1788), his plant was renamed *V. Rafinesquianum* by Schultes in 1820 (Syst. vi. 630). Although this name (*V. villosum* Raf.) may perhaps refer to the short-petioled plant, it is so poorly described and figured (in an inedited plate of Rafinesque) that its adoption for our plant seems very undesirable.

Rafinesque's description reads only "Viburnum villosum; leaves ovate, serrated, hairy, umbell [sic] 5 fidous, few flowered. Grows in Pennsylvania." This description is unfortunately too brief and indefinite to exclude V. venosum (i. e., the true V. pubescens) or V. scabrellum (T. & G.) Chapm., both of which also occur in Pennsylvania, and the character "umbell 5 fidous" is one not known, at least normally, in any of these species, all of which have a consistently 7-rayed umbel. The plate to which reference has been made throws no further light on the question. It is a tracing, executed many years ago for Dr. Sereno Watson, of the unique proof of one (no. 17) of a series of plates intended to illustrate Rafinesque's "Select New Plants of North America," but lost in his perhaps fortunate shipwreck of 1815 and consequently never published.1 This tracing shows a plant with 5-rayed short-villous umbel, few flowers, oval-ovate obtusish or acutish densely ciliolate leaves, short, ciliolate, estipulate petioles, and short-villous stem, and on the whole bears perhaps more resemblance to V. scabrellum than to V. "pubescens." However, as it seems impossible ever to identify it with any certainty, the name had best be dropped entirely, and with it the V. Rafinesquianum of Schultes, which rests directly on it.

No other name seems to have been given to any form of the short-petioled plant<sup>2</sup> until 1911, by which date the name V. pubescens had become firmly fixed by universal usage on the very short-petioled and pubescent form of the East. In that year a form from Missouri, which had been distributed and also grown at the Arnold Arboretum under the name V. affine Bush, was briefly characterized by Schneider under that name in his Handbuch as a doubtfully distinct species, and was shortly after reduced by Rehder to a variety of V. pubescens (of authors), and distinguished by its somewhat longer petioles and less

pubescent leaves.

Examination of all the material of the so-called V. pubescens at the Gray Herbarium and the Arnold Arboretum fully confirms Mr. Rehder's view that two varieties of the old "V. pubescens" may be distinguished with fair clearness. One, with leaves rather densely soft-pubescent all over the under surface, between as well as on the

<sup>&</sup>lt;sup>1</sup> An account of this collection of plates, by W. R. G[erard], will be found in Bull. Torr. Club xii. 37-38 (1885).

<sup>&</sup>lt;sup>2</sup> The name Viburnum pubescens var. petiolum (sic) Fitzpatrick (T. J. & M. F. L.), Proc. Iowa Acad. Sci. vii. 198 (1900), refers very clearly to V. molle Michx. (V. Demetrionis Deane & Robinson).

veins, is the common eastern plant, extending south and west to Georgia, Michigan, and Manitoba. In this plant the petioles are generally very short, 3–7 mm. or even less, although sometimes somewhat longer. In the other plant, which must be considered the typical form of V. affine as here taken, the leaves are pilose beneath only along the veins and in their axils, not between them, and the petioles are commonly longer (12 mm. or less). This plant is of more restricted and western range, being represented in the two herbaria consulted only from Ontario, Illinois, Iowa, Minnesota, Virginia, and Missouri. Mr. Rehder tells me that both these varieties have retained their distinctive characters during a number of years' cultivation at the Arnold Arboretum.

It seems best, therefore, to adopt for the plant which has been passing as Viburnum pubescens (Ait.) Pursh the name V. affine Bush, and that it may be eligible for use under the International Rules, to provide it with a Latin diagnosis, as follows.

Viburnum Affine Bush.— V. affine Bush! ex Rehder in Sarg. Trees & Shrubs i. 135 (1903), nomen; ex Schneider, Ill. Handb. Laubholzk. ii. 649. f. 415, l-m (1911), without Lat. diag. V. pubescens var. affine (Bush) Rehder, Mitt. Deutsch. Dendr. Gesell. 1913. 263 (1913), without Lat. diag. V. pubescens auth., not Pursh.— Frutex. Folia ovata acuta dentata (dentibus 4-9-jugis) supra sparse pilosa vel glabrata subtus plus minusve dense pilosa (pilis simplicibus) venosa (venis 5-7-jugis) 3.5-7 cm. longa 2.3-4.2 cm. lata, in petiolis 2-12 mm. longis ad basin conspicue 2-stipulatis. Cymi 7-radiati, floribus ca. 6 mm. latis. Drupae purpureae, putamine compresso in faciebus leviter 2-sulcato.— Represented in the Gray Herbarium from Vt. south to Ga. and west to Mo. and Manitoba.

The species may be separated into the two following varieties. Var. affine (Bush) comb. nov. (typical form).—Folia subtus in venis et in axillis venarum plus minusve pilosa ceterum glabra; petioli saepe usque ad 12 mm. longi.—V. affine Bush. V. pubescens var.

affine (Bush) Rehder. - Ont., Ill., Minn., Ia., Va., and Mo.

Var. hypomalacum, var. nov. Folia subtus dense pilosa; petioli saepius 3-7 mm. longi.— V. pubescens of most auth., not Pursh.— Type from Vermont: Ferrisburg, fl. 17 June 1881, fr. 7 Aug. 1880, C. E. Faxon (Type in Gray Herb.).— Vt. and Ont. to Ga., Mich., and Manitoba.

Another Viburnum, the name of which has become somewhat confused, is the American form of V. Opulus L., which has commonly been called V. Opulus L. var. americanum (Mill.) Ait., a name said to rest on V. americanum Mill. Gardn. Dict. ed. 8. no. 8 (1768). The type of Viburnum americanum Miller in the British Museum, however,

is nothing more nor less than Hydrangea arborescens L. The name V. Opulus var. Americanum Ait. Hort. Kew. i. 373 (1789) (as  $\beta$ . americana), which was published without reference to Miller's name, may continue in use for the plant.

The changes in nomenclature here proposed may for convenience of reference be summarized as follows.

VIBURNUM AFFINE Bush.— V. pubescens auth., not Pursh. For varieties, see discussion.

VIBURNUM PUBESCENS (Ait.) Pursh.— V. venosum Britton.

V. Pubescens (Ait.) Pursh var. Canbyi (Rehder).— V. venosum var. Canbyi Rehder, Rhodora vi. 60 (1904).

V. Pubescens (Ait.) Pursh var. longifolium (Dippel).—V. dentatum var. longifolium Dippel, Handb. Laubholzk. i. 183 (1889). V. longifolium "Loddiges" Zabel, in Beisnner, Schelle, & Zabel, Handb. Laubholz-Ben. 441 (1903). V. venosum var. longifolium (Dippel) Rehder, Rhodora vi. 61 (1904).

VIBURNUM OPULUS L. var. AMERICANUM Ait.— V. Opulus var. americanum "(Mill). Ait." of auth.

GRAY HERBARIUM.

# REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XXVI.

#### ROSACEAE.

#### AGRIMONIA.

- A. gryposepala Wallr. Rich woods and thickets, frequent.
- A. mollis (T. & G.) Britton. Moist woods, Oak Island, Revere; open woods on talus of diorite, Horn Pond Mt., Woburn.
- A. striata Michx. Woods and roadsides. No stations reported from southeastern towns; frequent elsewhere.

#### ALCHEMILLA.

A. VULGARIS L., var. VESTITA (Buser) Fernald & Wiegand. Five plants in a chicken-yard, Westford (Emily F. Fletcher, September 22, 1906, in Rhodora ix. 92, 1907, as A. pratensis F. W. Schmidt). See Fernald & Wiegand, Rhodora xiv. 233, 1912.